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ABSTRACT

This paper describes an innovative educational psychology program at Purdue University which attempts to build upon the students' own needs and interests. Each student is responsible for establishing a specific set of objectives for the semester. The objectives, which may be formulated independently of his instructor, are based on a booklet in which 21 broad areas are identified together with a reading list and set of informational objectives for each area. The students have considerable autonomy in the way in which they reach their goals and are encouraged to participate in projects and activities including observation in schools, teaching experiences, attendance at conferences, and preparation of instructional materials. Test taking has been deemphasized and evaluation is based on a "point system" in which each completed project carries a specified point value. Grades are determined by converting total points to grades using a scale presented to the student at the beginning of the semester. Several implications have become clear as the program developed: 1) the specific roles of student and professor have changed; 2) the confidence placed in the students has been well-founded; 3) the traditional approaches to course grading have become irrelevant; and 4) there has been a great emphasis on practicality and applicability. (MBM)

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Instructional Innovation in Educational Psychology: The Search for "Relevance"

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Who decides what will be taught, what is relevant, and what is worth learning? These questions have been asked for many years, but have recaptured the attention of many educators and critics of education in the United States in the last decade. Many recent critics of public education (e.g., Holt, 1967, 1970; Kohl, 1969; Rogers, 1969) have contended that, instead of assessing and building upon the interests and concerns of the students themselves, educators at all levels have persisted in teaching what they believe should be learned. The inadequacy of this strategy, reflected in increasing student and community dissatisfaction with educational practices and in our alarming drop out rates in secondary and higher education, cannot be ignored.

This problem is one which should be a very important concern of the educational psychologist, both in relation to his research and theorizing and in relation to his instructional efforts. Silberman (1970) has stated the challenge directly, in his assertion that teacher education programs are failing to meet their responsibilities to students, to provide by model as well as by admonition, effective alternatives to traditional procedures. Feldhusen (1970) surveyed students' concerns for relevant, practical, applicable learning in educational psychology courses and urged that the "time has come to turn back to students. (p.9)"

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Happily, several educational psychologists have recently described in this newsletter innovative programs which strive to improve the quality of instruction in educational psychology. In many instances, however, no matter how attractive an instructional innovation appears in other ways, we continue to attempt to induce or persuade students that some body of content, which we consider to be the "essential educational psychology," will be interesting and important for them to learn. In some ways, we are like the advertising agencies who attempt to convince the buyer that he really can't continue to do without something he didn't even realize he needed. For the most part, we seem unwilling to respect the students, or to trust them to identify and pursue learning which is important. After all our concern for relevance and the individual needs of the student has been expressed, we are still afraid that they might fail to learn something "Important," or that they will spend their time pursuing learning which isn't really "appropriate" for an educational psychology course. Despite the admonition to turn back to our students, it has been easier to stop one step short of that goal, one step short of creating an environment of respect out of which an authentically relevant educational psychology might emerge for teacher education.

How can we proceed if we believe that innovation in instruction in educational psychology should actually build upon the students' own needs and interests? This paper attempts to describe one effort, still in its infancy, at Purdue University (Treffinger and Davis, 1971).

We begin with an assumption that there are three critical questions which a student must consider:

(1) What do I intend to learn?

(2) How can I learn it?

(3) How will I know when I have attained my goal?

These questions are clearly related of course, to the major components of many recent "models" of instruction (DeCecco, 1968; Popham and Baker, 1970), rephrased and somewhat simplified to make the student himself the "instructional designer." In more formal terms, the three problems involved are formulating educational goals and instructional objectives, designing and implementing instructional procedures, and assessing the learner's performance. In this paper, some of our provisions for various student responses to these questions will be described, and some general implications for educational psychology will be considered.

Goals and Objectives

Each student is responsible for establishing a specific set of objectives for the semester, expressed in the form described as "informational objectives" by Kibler, Barker, and Miles (1970). We assume, first, that learning is facilitated by utilizing specific statements of objectives. Such objectives assist the learner in clarifying his intentions, directing his efforts, and communicating his needs and experiences more effectively. In addition, we assume that having freedom in a learning environment does not necessarily imply complete absence of structure; rather, the presence of some organization or structure may facilitate effective learner-controlled instruction.

Every student can formulate his objectives for the course completely independently of the instructor, although he is not forced to do so. Each student receives a booklet, in which 21 broad areas or topics in educational psychology are identified (e.g., human learning, motivation, cognitive development,etc.). For each topic, the booklet includes a structured reading list and from three to ten informational objectives. A student can begin, then, by selecting the topics which interest him, and directing his efforts to the objectives which are provided. Any student, however, can modify any of the objectives, to make them more appropriate for his own goals and interests, or substitute completely different objectives. As a rule of thumb, we have urged that students identify approximately eight topics for a semester; many students prefer to work more intensively, however, or fewer topics.

We maintain a folder for every student, in which the student places a written statement of his goals for the semester. The student is asked to include the topics which he has selected, and to include written objectives where any modifications or substitutions have been made. This "plan of study" can be modified by the student, on his own, at any time during the semester; it is written only for the purposes of establishing a clearly defined set of objectives and for communication value.

The informational objectives which we provide for each topic serve several purposes. They provide models for students to use in developing their own objectives; they provide the student with initial descriptions

of the scope and content of each topic, which can be used to clarify the student's initial competence as well as to arouse interest in a topic; and, they provide a basis for designing, implementing, and evaluating instructional activities.

Instructional Procedures

Once the student has translated his goals for the semester into a specific set of instructional objectives which he will pursue, the second question arises: "How will I reach my goals?" Students have considerable autonomy and flexibility in answering this question; we have attempted to create an environment in which students work independently, or in small groups of their own design, with none of the mass information-transmission attempt that characterizes the traditional "lecture-discussion" stereotype.

Reading lists are provided which are organized in a three-part structure. The first section is intended to be introductory; this list can be used by the student who seeks only to test his interest in the topic or to check on his present competence. It includes basic information sources and chapter recommendations from several popular textbooks in educational psychology. (Students are not "required" to purchase any texts, but several are available in local bookstores and in the university library.) The second section provides a more extensive bibliography which, taken with the readings in the first section, would be useful for the student in acquiring the knowledge or information included in the stated objectives for that topic. The last section is a more extensive bibliography for the topic, which the student can use

to pursue the topic more thoroughly in relation to supplementary objectives which he may have formulated.

We are strongly committed, however, to the belief that educational psychology involves more than reading; we believe that many students may learn more effectively from active participation in projects and activities than from reading alone. Therefore, each student also receives a booklet which describes a number of projects and activities which relate to appropriate objectives for each topic. The projects and activities described in this booklet range from very traditional academic projects, such as abstracts of research articles, reviews of research, and short term papers, to projects involving observation in schools, teaching experiences, participation in research activities, attendance at conferences and conventions, and preparation of instructional plans and materials. Some students have designed and implemented micro-teaching activities, developed extensive coourse materials, attended regional and national conventions, participated in sensitivity and encounter groups, prepared papers which have been submitted for publication, and interviewed candidates for the office of Superintendent of Public Instruction.

Test-taking has been deemphasized. It is possible for students to take objective tests to obtain feedback about their acquisition of knowledge related to the stated objectives, but these tests may be repeated as needed, and play only a minor role in course evaluation.

The nature of "classes" has also changed considerably. Instead of serving as a time for transmitting information from the instructor, where the dominant student behaviors are sitting, listening, writing, and (more than occasionally) dozing, there is an emphasis on action and participation. The class meeting provides an opportunity for students to meet together and exchange ideas and experiences, and to plan activities which are of concern to them. On some occasions, films, case studies, and written exercises are provided for interested students; these are identified in a written schedule given to each student at the beginning of the semester.

We have also used class time to bring to interested groups of students a number of resources from outside the course staff. Last semester, for example, some classes met and talked with an instructor from a Montessori school, a "free school" teacher, the organizers of a local "alternative" community school, a teacher's association negotiations specialist, and a coordinator of special educational programs for gifted children from a nearby city. One of the most exciting "classes" was an informal visit with a group of children; we had a number of children from ages 4 to 18, with almost one visitor for each student enrolled in the course. Some students have worked together to plan observation trips to local schools and community agencies, to conduct surveys and questionairre research, and to provide opportunities to participate in instruction in local schools.

In the last year, this approach has been utilized in courses open to upper-level undergraduates as well as graduate students. As

a result, the enrollment has included many experienced classroom teachers (some presently teaching in local schools) as well as undergraduates preparing to teach and graduate students from a variety of disciplines. We are planning to extend the approach, on an experimental basis, to undergraduate educational psychology courses which enroll primarily sophomores and juniors. We hope that, through this extension and the utilization of a common classroom for several sections of both courses, we shall be able to extend the number and kind of activities which students develop and implement.

Course Evaluation

Although test-taking has been deemphasized, in favor of active student participation in a variety of activities, it is still necessary for evaluation to occur. In phrasing our concern from the student's point of view ("How will I know when I've attained my goal?"), however, it is obvious that traditional, norm-referenced evaluation models are inappropriate. Since our students are responsible in large measure for the selection of their own topics and formulation of their own objectives and learning activities, external evaluation criteria are not useful. On the other hand, completely personal, self-evaluation models may lack the validity and reliability which characterizes an effective evaluation procedure.

In general, it seems fair to conclude from our efforts with this approach so far, that students welcome assistance in evaluating their performance-- but with certain provisions. Increasingly, students are

reluctant to accept uncritically the judgments of external and arbitrary authorities. They are not interested in our assignment of grades to products, in our divining numbers to put on papers. They <u>are</u> interested in identifying and applying appropriate criteria for judging products, and they <u>are</u> interested in developing methods for determining whether objectives have been reached. When evaluation involves these activities, and when it take place in an atmosphere of mutual confidence and respect between student and professor, it is accepted and even sought. When the student recognizes that evaluation is intended to help him in his learning rather than to pass judgment about his own adequacy, or his competence in relation to other people, it is regarded as an important aspect of the course.

We have attempted to use a "point system" to provide a basis for assigning grades in the course, which is still imposed on us by the university's letter grade system.

Each project or activity in the booklet provided for the students carries a specified point value. As each student completes an activity, he records it (and, in most instances, provides a written product, although this is not required) on a chart in his own folder. Thus, students' folders contain their plan of study and objectives, their reports on projects and activities where appropriate, and a running record of accumulated points.

Grades are determined by converting total points to grades, using a scale presented at the beginning of the semester. The scale lists the minimum number of points necessary to obtain a specified grade in the course.

A student can, therefore, report on his activities and projects, thereby obtaining points, until his total reaches the point required for a letter grade which he will accept for the course. He may stop as soon as he reaches a passing grade with which he will be satisfied, or continue on to a higher level. Many students have continued to report on projects and activities even after a grade of A had been reached, since every report submitted is read by a member of the course staff and returned with comments and suggestions. The student has the advantage of knowing his total points or standing in the course all at any time. In addition, every project or activity can make a positive contribution to his final grade, while there are no negative values.

If a student takes tests on the stated objectives for the topics he has selected, these can be used to contribute to his point total. For any test taken, the student receives one point if he scores at least 80% correct, or two points if he scores at least 90% correct. Since 30 points have been necessary for a grade of A, and at least 22 for a grade of B, points earned by test taking usually play only a minor role in the determination of grades for most students. (Nevertheless, it may be important to point out that, in accord with our emphasis on the student's own responsibility for the course, it <u>is</u> possible for a student to obtain an A in the course on the basis of test performance.)

Self-evaluation is also incorporated into our evaluation model. Each student is encouraged to submit (in writing or through a personal conference) self-evaluation reports at any time, or at several times, during the semester. In addition, any student who believes that his point total does not accurately portray his accomplishment in the course is encouraged to identify additional evaluation criteria and to evaluate his performance in the light of those criteria. Students may also be given an Incomplete grade in the course if they propose to continue work toward a particular grade after the end of the semester, within university regulations pertaining to the assignment of the Incomplete grade.

Implications

Our primary goal has been to develop and implement an innovative approach to instruction in educational psychology which builds upon students' interests and motives. As we have created this program, several implications have become clear.

First, traditional definitions of the student and professor interaction have become inappropriate, and the specific roles for each have changed. Student and professor are no longer adversaries. Instead, they have become cooperative, partners in the process of inquiry. The professor's responsibility is no longer to pass out pre-determined knowledge and ready-cut opinions, and to "give" grades to students who hand back the right opinions and the bulk of the knowledge. Instead, to use Rogers' terms the professor becomes a "facilitator." The course becomes a dynamic laboratory in which professors, assistants, and students work (and learn) together.

This shift in role definition is not always easy for students to deal with. Some, perhaps because of years of experience with rigid, approached, have trouble adjusting to the program. At first, we have found, some students will act bewildered, and will drift rather aimlessly. Then, as reports about Summerhill have also suggested, there comes a period of "testing;" some students test the limits of their control, to try to find out whether we really mean it. Next, there has often emerged a "blaming" period, in which some students feel inactive, or feel that they aren't learning anything, and during which they seek to determine who is at fault. It may take the form, "You're not teaching me anything." One summer student put it similarly: "I paid $210 for 30 classes, but I didn't get $7 a day worth of you." For others, it involves self-blame, usually: "This would be great, but I'm the kind of person who has to be pushed. I'm too lazy." After this, however, when we have still refused to "take over" again, students recognize that they have control in fact as well as on paper over their own experiences. Then, productive thinking gets started.

Next, we have found that our confidence in students has been well-founded. Students do learn educational psychology; in fact, they learn a surprising amount of things that we were "afraid" they might miss. Although our data in this area are still quite subjective or impressionistic, rather than empirical, we are planning to conduct more formal evaluations of the effects of the program.

Third, we have found that traditional approaches to course grading become irrelevant. There is a shift, the value and meaning of which is clearly recognized by students very early in the course, away from interpersonal competition for grades or norm-referenced instruction, and toward a criterion-referenced evaluation model.

Finally, because of changes in the nature of "classes" and the diversity of the needs and interests of the students, there has been a great emphasis on practicality and applicability. Seldom do students leave the courses now complaining that they don't see what educational psychology has to do with teaching. They are discovering, in very personal ways, the uses and applications, and the limitations of educational psychology for the classroom teacher. In addition, many graduate students who do not plan to teach in public elementary or secondary classrooms find that their needs are also better met through this course structure than in many education courses, and they also frequently discover that classroom teachers have ideas and concerns which have merit.

Research is now planned in which we hope to examine many important questions concerning the procedures we have described in this paper. Such questions include the assessment of the independent and interactive effects of specific components or aspects of the approach, systematic investigations of interactions selected student characteristics with treatments, and the permanence and generalizability of the effects of the course on teacher behaviors.

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